National Park Service
U.S. Department of the Interior

# National Park Service Fire Ecology Program Strategic Plan
# 2004 Action Plan

***WORKING FINAL DRAFT*** *(pending approval of the Strategic Plan)*

*The mission of the National Park Service Fire Ecology Program is to apply fire ecology to guide fire and land management:*

- *Supporting land management decisions and practices with science-based expertise*
- *Providing leadership and innovation in the fire ecology community*
- *Articulating ecologically sound objectives to strengthen and facilitate the land management planning process*
- *Promoting a widely communicated and easily accessible knowledge base*
- *Facilitating coordination between wildland fire and other resource management programs.*

**3/3/04 version**

The National Park Service (NPS) Fire Ecology Program 2004 Action Plan outlines the work to be accomplished during the 2004 fiscal year to make significant progress towards achieving the long-term goals of the Fire Ecology Program Strategic Plan (in draft). The action items described in this Action Plan are designed to carry out selected, high priority strategies that will result in meeting specific objectives and mission goals of the program. The 2004 Action Plan emphasizes the following efforts to support and implement adaptive management and to effectively integrate the Fire Ecology Program with the rest of the NPS Fire Management Program:

*Integration*

- Define the structure and function of the Fire Ecology Program so that its role within the NPS Fire Management Program is clear.

- Support the NPS Fuels Management Program by providing recommended fuels treatment monitoring protocols and by defining fire ecologists' roles in the fuels management planning, implementation, and evaluation and review processes.

- Integrate fire and resource management programs by collaborating with the NPS Inventory and Monitoring Program to meet resource monitoring goals.

- Develop communication strategies to improve information exchange within the Fire Ecology Program and garner support for the program throughout the National Park Service.

*Adaptive Management*

- Ensure that field-level planning, monitoring, and reporting activities are science-based and are used effectively to evaluate and refine management programs.

- Improve Fire Ecology Program data management to provide accessible, useful information to managers and scientists in a timely manner.

- Coordinate with NPS and interagency partners to develop and implement landscape-level planning procedures using the best available tools to meet resource management objectives.

- Evaluate the Fire Ecology Program to ensure it is achieving its stated mission.

The specific action items selected for the 2004 Action Plan are presented in a table format describing the task, who is responsible for completing the task, and the target date for completion. Note that action items that were originally identified as high priority but that would not likely be accomplished due to time or other constraints are identified in italics in the table (and indicated with "defer" in the completion date column).

## Mission Goal I. Fire Ecology Program Structure and Function – Integrate the Fire Ecology Program with the larger fire management community by clearly defining the Fire Ecology Program structure and function.

| Action Required | By Whom | By When |
|---|---|---|
| **Objective Ia.** The role and organizational structure of the Fire Ecology Program is well-defined, understood, and recognized within the National Park Service (NPS) Fire Management Program by 2006. | | |
| **Strategy Ia1**. Develop organization and functional charts for the Fire Ecology Program and other relevant positions (e.g. Fire Management Officers (FMO), Prescribed Fire Specialists) and establish relationships of program specialists with the Regional and National office staffs. | | |
| **(a)** *Develop an organization chart showing supervisory and functional relationships for National and Regional Office Fire Ecology Program staff and post to Intranet.* | *Benson | *defer (detailer if time)* |
| **(b)** *Develop an organization chart showing supervisory and functional relationships for Regional Offices' and Parks/Clusters' Fire Ecology Program staff and post to Intranet.* | **Kerr Regional Fire Ecology Program Managers (RFEPMs)* | *defer (detailer if time)* |
| **Strategy Ia2.** Define the roles and responsibilities of the Fire Ecology Program staff. | | |
| **(a)** Develop a chart demonstrating positions and recommended duties within the Fire Ecology Program and post to Intranet. | *detailer to be determined | 1 Oct 2004 |
| **(b)** Develop role and function statements identifying expectations and workload priorities for each type of Fire Ecology Program position and post to Intranet. | *detailer to be determined | 1 Oct 2004 |
| **Strategy Ia4.** Refine NPS Fire Monitoring Policy and specify the roles of Fire Ecology Program staff in policy implementation. | | |
| **(a)** Review Reference Manual 18 (RM-18) Chapter 11, Wildland and Prescribed Fire Monitoring, including additions of reporting, fuels monitoring/wildland-urban interface (WUI), adaptive management, and program reviews, and submit recommended edits for approval. Include defining the scope of the program and roles and responsibilities discussion *[links to action items Ib1(b), Ic1(a), and IIa1(a)]*. | *Noble (task group) | 1 Sep 2004 |
| **(b)** Ensure consistency between RM-18 Chapter 11, Wildland and Prescribed Fire Monitoring, and Chapter 4, Fire Management Plans [*links to action item IVa1(a)]*. | *Noble | 1 Sep 2004 |
| **Objective Ib.** The NPS Fire Ecology Program is well-integrated with the NPS Fire Management Program by 2006. | | |
| **Strategy Ib1.** Integrate the Fire Ecology Program and the NPS Fuels Management Program. | | |
| **(a)** Request Fire Ecology Program membership on national level committees that determine agency implementation plans for the National Fire Plan (NFP) *[links to action item IIa1(b)]*. | *Benson through Wallace | 1 Jun 2004 |
| **(b)** Collaborate with fuels personnel to develop recommendations for Wildland Urban Interface Initiative (WUII) and mechanical treatment monitoring protocols; Communicate these protocols and recommended roles of fire ecologists in the fuels management planning, implementation, and evaluation and review processes, to fire management program staff through the Fire Management Program Center (FMPC) Fuels Management Specialist *[links to action item Ia4(a)]*. | *Wills (task group) | 1 Oct 2004 |
| **(c)** Review RM-18 Chapter 10, Prescribed Fire, to ensure that fire ecologists will participate in developing projects, and submit recommended edits for approval. | *Wallner (task group) | 1 Sep 2004 |
| **Objective Ic.** The success of the Fire Ecology Program in achieving its mission is assured through program evaluation, beginning in 2003. | | |
| **Strategy Ic2.** Evaluate progress on Strategic Plan implementation on a regular basis. | | |
| **(a)** Create an annual Action Plan identifying priority action items that need to be accomplished each year, personnel responsible, and timeframes. | *Keifer Fire Ecology Steering Committee (FESC) | Annually |
| **(b)** Determine appropriate format/mechanism for Strategic Plan maintenance and post the Strategic Plan and current Action Plan to the Intranet. | *Keifer | Annually |
| **(c)** Update the Action Plan at least quarterly to reflect accomplishments and assignment or due date changes and post updates to Intranet. | *RFEPMs Conference Call Leader | Quarterly Jan, Apr, Jul, Oct |
| **(d)** Review the Strategic Plan annually at the Fire Ecology Steering Committee meeting to revise and update the content as necessary and post updates to Intranet. | *Benson | Annually by 31 Oct |
| **(e)** Include a brief Strategic Plan progress update and reminders of upcoming due dates as a regular agenda item on each Regional Fire Ecologists monthly conference call. | *RFEPMs Conference Call Leader | Monthly |

| Action Required | By Whom | By When |
|---|---|---|
| **Strategy Ic3.** Evaluate the Fire Ecology Program structure and position needs. *(NOTE: *Strategy Ic3 was not identified as a high priority, but two recurring action items are required each year, and therefore, are included in the Action Plan).* | | |
| **(a)** Provide annual fire ecology cluster definition updates (per Business Rules for Fire Ecology Program Staffing, section F4) to National Fire Ecology Program Manager (NFEPM) and make budgetary recommendations to pass on to FMPC/Fire Management Leadership Board (FMLB). | *Benson RFEPMs | Annually by 31 Mar |
| **(b)** Annually provide details of actual staffing for past fiscal year (per Business Rules for Fire Ecology Program Staffing, reporting rules section) to NFEPM to pass on to FMPC. | RFEPMs | Annually by 31 Dec |
| **Objective Id.** The NPS Fire Ecology Program Strategic Plan is well-integrated with other strategic planning efforts by 2004. | | |
| **Strategy Id1.** The Fire Ecology Program Strategic Plan is integrated into the NPS Wildland Fire Management Strategic Plan and links to the NPS Strategic Plan. | | |
| **(a)** Review other strategic plans at all levels and functional areas within the National Park Service to determine relationships with the Fire Ecology Program. | *Keifer | Completed |
| **(b)** Integrate the Fire Ecology Program Strategic Plan into the FMPC Wildland Fire Management Strategic Plan either as an appendix or other method. | *Keifer | 1 Feb 2004 |
| **(c)** Provide references to the appropriate sections of the NPS Strategic Plan within the Fire Ecology Program Strategic Plan. | *Keifer | Completed |

## Mission Goal II. Science-based Management – Ensure fire management activities are informed and supported by the best available scientific information.

| Action Required | By Whom | By When |
|---|---|---|
| **Objective IIb.** Knowledge gained through Fire Ecology Program activities is consistently analyzed, evaluated, and made available for program planning and refinement by 2005. | | |
| **Strategy IIb1.** Develop a structured reporting process for monitoring program data analysis and results that reports accomplishments to Park Superintendents, Regional Fire Management Officers, the Fire Management Leadership Board, and the public. | | |
| **(a)** Define annual reporting process for national-level monitoring efforts. | *Benson, RFEPMs | 1 Oct 2004 |
| **(b)** Define annual reporting process for regional-level monitoring efforts. | *Noble, RFEPMs | 1 Oct 2004 |
| **(c)** Define annual reporting process for park-level monitoring efforts. | *Thorstenson, DeCoster | 1 Oct 2004 |
| **(d)** Designate and support selected parks for more detailed analysis and interpretation of park data sets. | *Benson, RFEPMs | 1 Oct 2004 |
| **(e)** Complete success stories on applications of monitoring program data and post to Intranet. | *Keifer, RFEPMs | 1 Oct 2004 |
| **(f)** Publish example applications of various analysis techniques and results (e.g. trend analysis, meta-analysis). | Various (e.g. Kopper/Peterson) | 1 Oct 2004 |
| **Objective IIc.** Landscape-level planning incorporating ecological modeling, desired future conditions, risk assessment, and treatment priority concepts is implemented by 2006. | | |
| **Strategy IIc1.** Work with NPS and interagency partners to develop and implement landscape-scale planning efforts, including LANDFIRE, the Fire Program Analysis (FPA) system, and the Fire Learning Network (FLN) program. | | |
| **(a)** Review tools currently available to assist with landscape-scale planning and post to Intranet. | *Wills (task group) | 1 Sep 2004 |
| **(b)** Compile examples of landscape-scale planning efforts (risk assessments, landscape treatment priority analyses, existing ecological models) and post to Intranet. | *Wills | 1 Sep 2004 |
| **(c)** Compile a list of technical experts who are willing to provide assistance in landscape-scale planning and post to Intranet. | *Wills | 1 Sep 2004 |
| **(d)** Determine data needs for landscape-scale planning efforts. | *Wills (task group) | 1 Sep 2004 |
| **(e)** Provide NPS representation to coordinate with The Nature Conservancy's (TNC) Fire Learning Network (FLN) Program to explore possibilities for collaboration at national, regional, and local levels. | *DeCoster, Wills | 1 Oct 2004 |
| **(f)** *Develop and implement landscape-scale planning workshops to include ecological modeling and development of desired future conditions [links to Strategy IVa3].* | | *defer* |
| **(g)** Work with Fire Program Analysis (FPA) system NPS representative to coordinate landscape-level planning efforts on an interagency basis *[links to action item IVa2(j)]*. | *Benson | 1 Sep 2004 |

| Action Required | By Whom | By When |
|---|---|---|
| **(h)** Encourage integration of ecological modeling concepts, desired future condition development, and adaptive management in existing National Wildfire Coordinating Group (NWCG) fire ecology training curriculum (e.g. RX-310, RX-510, M-580). | *Noble | 1 Feb 2004 |
| **(i)** Continue to support field validation of burn severity assessment data. | *Benson | 1 Sep 2004 |
| **(j)** Initiate development of burn severity applications workshop and conduct trial workshop. | *Benson, Burn Severity Mapping working group | 1 Sep 2004 |
| **(k)** Coordinate with LANDFIRE efforts to ensure that NPS needs are represented and NPS data and information is made available where possible. | *Benson | 1 Oct 2004 |
| **Strategy IIc2**. Utilize a consistent/relevant process to document Fire Regime Condition Class (FRCC) and integrate FRCC assessments into ecological models and other planning efforts. | | |
| **(a)** Work with Fuels/Fire-GIS personnel to define NPS Fire management program roles, responsibilities, and procedures with regard to FRCC classification and documentation. | *Benson, Bahr, Wallace | 1 Oct 2004 |
| **(b)** Ensure Regional & Park fire ecology staff are informed of FRCC procedure information and attend FRCC training. | *NPS FRCC rep | 1 Sep 2004 |
| **(c)** Evaluate existing standard FRCC methods and alternative protocols as they develop. | *Allen, Reeberg | 1 Oct 2004 |
| **(d)** Post to Intranet examples of existing FRCC development processes utilized in various parks and regions. | *Schon | 1 Oct 2004 |
| **(e)** Ensure that FRCC assessments are incorporated into the Natural Resource Program Center (NRPC) Watershed Assessment Program *[links to Strategy IVa3]*. | *Eckert, Benson | 1 Oct 2004 |

## Mission Goal III. Information Management – Provide fire ecology-related data and information that is easily accessible and valuable to all user groups.

| Action Required | By Whom | By When |
|---|---|---|
| **Objective IIIb.** Fire ecology data and information are collected, stored, and accessed using the latest technologies for use by the Fire Ecology and other related programs and projects by 2005. | | |
| **Strategy IIIb1.** Design and build an application to collect, store, index, and analyze fire ecology data and information. | | |
| **(a)** Develop the Fire Ecology Assessment Tool (FEAT) to meet the data and information needs of the Fire Ecology Program. | *Benson | 1 Sep 2004 |
| **(b)** Develop an overall FEAT Management Plan identifying working groups, roles and responsibilities, communication methods, and timelines for FEAT. | *Noble | Completed |
| **(c)** Provide strategic guidance for the ongoing development, implementation, and maintenance of FEAT. | *Benson, Delaney, RFEPMs | 1 Oct 2004 |
| **(d)** Test the FEAT application and provide timely feedback to the developer to improve the functionality and ensure the usefulness of the application. | *Benson (task group) | 1 Sep 2004 |
| **(e)** Conduct a field assessment of current data conditions to determine the workload for the migration of legacy data. | *Benson | 1 Jan 2004 |
| **(f)** Develop and implement a plan for the migration of legacy data (Fire Monitoring Handbook (FMH)) to FEAT so that these data can be easily accessed and analyzed. | *Keifer, Benson, Reeberg, Kopper, Kerr, DeCoster, McInness, Gorman | 1 Apr 2004 |
| **(g)** Develop and maintain a protocols catalog for FEAT to encourage sharing protocols where possible to minimize duplication of effort in protocol development. | *Benson, RFEPMs | 1 Oct 2004 |
| **(h)** Develop recommended standards for collecting fire weather, fire behavior, and smoke data and incorporate this data into FEAT. | *Burgard (task group) | 1 Oct 2004 |
| **(i)** Manage the FEAT contracts to ensure that project timelines and specifications are met. | *Delaney, Benson | Ongoing |
| **(j)** Provide oversight and maintenance of the FEAT implementation process (*Note: This strategy was merged with strategy IIIb1c*). | See strategy IIIb1c | 1 Oct 2004 |
| **(k)** *Develop an ecological 'disturbance' database in FEAT.* | **Reeberg, Mike Story* | *defer* |
| **(l)** Continue to archive burn severity spatial data on Earth Resources Observation Systems (EROS) data center server and maintain access to data through National Burn Severity Mapping Project website. | *Benson | 1 Sep 2004 |
| **(m)** Migrate Composite Burn Index (CBI) data to standard format and determine location to store data and make accessible through the Internet. | *Benson, Burn Severity Mapping working group | 1 Sep 2004 |

## Mission Goal IV. Integrate Fire and Resource Management – Facilitate coordination between the fire and resource management programs to ensure that the fire program meets resource management goals.

| Action Required | By Whom | By When |
|---|---|---|
| **Objective IVa**. Fire and resource management staff will work together to ensure that fire-related resource management objectives are integrated in all levels of park planning by 2007 (General Management Plan (GMP), Resource Management Plan (RMP), Fire Management Plan (FMP), project-level plan); develop policy, guidance and new initiatives for fire-related land management planning and related issues. | | |
| **Strategy IVa2.** Establish NPS administrative processes that encourage collaboration between the Fire Ecology Program and natural and cultural resource planning efforts. *(NOTE: *Strategy IVa2 was not identified as a high priority, but two of the action items were identified as high priorities and therefore, are included in the Action Plan)*. | | |
| **(j)** Work with Fire Program Analysis (FPA) system staff to ensure FPA incorporates natural and cultural resource management information and ecological concepts *[links to action item IIc1(g)]*. | *Allen (task group) Manley | 1 Sep 2004 |
| **(k)** Designate a fire ecologist to serve on each of the 16 NPS Exotic Plant Management Team (EPMT) steering committees. | *Eckert RFEPMs | 1 Feb 2004 |
| **Objective IVb.** The Fire Ecology Program will collaborate with the Inventory and Monitoring (I&M) program (branch of the NPS Natural Resource Program Center) by 2006 to efficiently meet resource-monitoring goals. | | |
| **Strategy IVb1.** Continue to implement collaborative vegetation/fuels mapping program with the NPS I&M program. | | |
| **(a)** *Develop vegetation and fuels mapping priorities at both regional and national levels, working with other fire and resource management staff.* | **Benson, RFEPMs* | *defer until Ft. Collins position is filled* |
| **(b)** *Formalize vegetation and fuels mapping development needs assessment process.* | **Benson, RFEPMs* | *defer* |
| **(c)** *Establish fire ecologists as one of the fire program contacts for vegetation and fuels mapping to ensure vegetation maps are meeting fire management needs.* | **Benson* | *defer* |
| **(d)** *Develop guidelines and tools for updating vegetation and fuels data layers.* | **Benson, RFEPMs* | *defer* |
| **Strategy IVb2.** Integrate the Fire Ecology Program and I&M network inventory and monitoring efforts. | | |
| **(a)** *Establish fire ecologists as the primary contact for collaboration with I&M networks by providing contact information to fire program and I&M network staff and posting to Intranet.* | **Keifer, RFEPMs* | *defer* |
| **(b)** *Encourage fire ecologist participation in I&M workshops to ensure that fire ecosystem models are incorporated in I&M conceptual ecosystem models [links to action item IIc1(f)].* | **Fancy, RFEPMs* | *defer Ongoing* |
| **(c)** Explore the potential to pool resources with the I&M program in collaborative monitoring efforts (e.g. invasive species monitoring work group, combining field crews, etc.). | *Fancy, *Benson, RFEPMs | Ongoing |
| **(d)** *Develop a work plan to integrate fire effects data with I&M program databases [links to action item IIIa2(b)].* | **Benson, Fancy* | *defer* |
| **(e)** *Facilitate sharing monitoring protocols by consulting and populating the I&M protocol database.* | **DeCoster (task group)* | *defer* |
| **(f)** *Host regional workshops to facilitate integrated analysis of fire monitoring and I&M data sets.* | *?* | *defer* |
| **(g)** *Integrate the burn severity mapping program with the I&M program.* | **Benson* | *defer Ongoing* |

## Mission Goal V. Employee Development and Retention – Promote a work environment where employees are highly skilled and valued.

| Action Required | By Whom | By When |
|---|---|---|
| **Objective Vc.** The Fire Ecology Program develops and participates in training to meet programmatic needs by 2006. | | |
| **Strategy Vc1.** Develop the Fire Ecology Program training curriculum. *(NOTE: *Strategy Vc1 was not identified as a high priority, but one of the action items was identified as a high priority and therefore, is included in the Action Plan).* | | |
| **(c)** Develop and implement statistics refresher, including training for commercially-available statistics software. | *Kerr, Benson, Gatewood, Miller | 1 Jun 2004 |
| **(d)** Develop and implement FEAT training. | *Benson, FEAT Testing working group | 1 Jul 2004 |
| **Strategy Vc2.** Ensure that fire ecology is integrated into the interagency fire management training curriculum. *(NOTE: *Strategy Vc2 was not identified as a high priority, but one of the action items was identified as a high priority and therefore, is included in the Action Plan)*. | | |
| **(a)** Request Fire Ecology Program membership/representation on National Wildfire Coordinating Group (NWCG) Fire Use Working Team. | *Noble through Dick Bahr | 1 Nov 2003 |

## Mission Goal VI. Communication – Ensure common understanding, acceptance, and support of the Fire Ecology Program.

| Action Required | By Whom | By When |
|---|---|---|
| **Objective VIa**. The Fire Ecology Program staff develop and implement a plan to communicate clearly, consistently, and effectively with all internal and external audiences by 2006. | | |
| **Strategy VIa1** Develop a communication strategy for distributing and exchanging information within the NPS Fire Ecology Program staff. | | |
| **(a)** Implement monthly conference calls for the Regional Fire Ecology Program Managers (RFEPM) and quarterly calls for the Fire Ecology Steering Committee. | Benson | Monthly |
| **(b)** *Include discussion board as part of Fire Ecology Program website.* | ? | *defer* |
| **(c)** Conduct annual Fire Ecology Steering Committee meetings. | Benson | Annually |
| **(d)** Conduct biennial meetings when possible for all NPS fire ecology staff (held in conjunction with science/technology updates) and continually evaluate the most efficient meeting timeframe and process. | Benson | Biennially |
| **(e)** Publish and manage a NPS fire ecology newsletter and post to Intranet. | *Eric Miller, RFEPMs | Annually |
| **(f)** Enhance, manage, and update the Fire Ecology Program Intranet and Internet websites (using I&M site as a model) *[links to action item VIa2(a)]*. | *Keifer | 1 Sep 2004 |
| **(g)** Establish and maintain Lotus Notes mailing groups for FESC, RFEPMs, Field Ecologists, and Lead Monitors. | *DeCoster | Completed |
| **Strategy VIa2.** Develop a communication strategy for exchanging fire ecology information within the National Park Service. | | |
| **(a)** Enhance, manage, and update Fire Ecology Program Internet and Intranet websites by establishing contacts and a process for maintaining the websites *[links to action item VIa1(f)]*. | *Keifer | 1 Sep 2004 |
| **(b)** *Develop an external communications plan for FEAT.* | **Benson* | *defer* |
| **(c)** Encourage participation and presentations at scientific meetings and conferences (George Wright Society, regional Resource Management meetings) by sending out e-mail notification detailing meeting locations and dates and maintaining an updated list on the Intranet [*links to action item Vb2(d)]*. | *Keifer | 1 Sep 2004 |
| **(d)** Communicate the Fire Ecology Strategic Plan to the National Park Service by posting the plan on the NPS Intranet site. | *Keifer | 1 Sep 2004 |